Propellant, solid. Substances consisting of a deflagrating solid explosive, used for propulsion.

Propellants. Deflagrating explosives used for propulsion or for reducing the drag of projectiles.

Release devices, explosive. Articles consisting of a small charge of explosive with means of initiation. They sever rods or links to release equipment quickly.

Rocket motors. Articles consisting of a solid, liquid, or hypergolic propellant contained in a cylinder fitted with one or more nozzles. They are designed to propel a rocket or guided missile. The term includes: rocket motors; rocket motors with hypergolic liquids with or without an expelling charge; and rocket motors, liquid fuelled.

Rockets. Articles containing a rocket motor and a payload which may be an explosive warhead or other device. The term includes: guided missiles; rockets, line-throwing; rockets, liquid fuelled, with bursting charge; rockets, with bursting charge; rockets, with expelling charge; and rockets, with inert head.

Signals. Articles consisting of pyrotechnic substances designed to produce signals by means of sound, flame, or smoke or any combination thereof. The term includes: signal devices, hand; signals, distress ship; signals, railway track, explosive; signals, smoke.

Sounding devices, explosive. Articles consisting of a charge of detonating explosive. They are dropped from ships and function when they reach a predetermined depth or the sea bed.

Substance, explosive, very insensitive (Substance, EVI) N.O.S. Substances which present a mass explosive hazard but which are so insensitive that there is very little probability of initiation, or of transition from burning to detonation under normal conditions of transport and which have passed test series 5.

Torpedoes. Articles containing an explosive or non-explosive propulsion system and designed to be propelled through water. They may contain an inert head or warhead. The term includes: torpedoes, liquid fuelled, with inert head; torpedoes, liquid fuelled, with or without bursting charge; and torpedoes, with bursting charge.

Tracers for ammunition. Sealed articles containing pyrotechnic substances, designed to reveal the trajectory of a projectile.

Warheads. Articles containing detonating explosives, designed to be fitted to a rocket, guided missile, or torpedo. They may contain a burster or expelling charge or bursting charge. The term includes: warhead rocket with bursting charge; and warheads, torpedo, with bursting charge.

[Amdt. 173–224, 55 FR 52617 Dec. 21, 1990, as amended at 56 FR 66267, Dec. 20, 1991; Amdt. 173–241, 59 FR 67492, Dec. 29, 1994]

§ 173.60 General packaging requirements for explosives.

(a) Unless otherwise provided in this subpart and in §173.7(a) of this subchapter, the packaging used for explosives (Class 1) must meet Packing Group II requirements. Each packaging used for an explosive must be capable of meeting the test requirements of subpart M of part 178 of this subchapter, at the specified level of performance, and the applicable general packaging requirements of paragraph (b) of this section.

(b) The general requirements for packaging of explosives are as follows:

(1) Nails, staples, and other closure devices, made of metal, having no protective covering may not penetrate to the inside of the outer packaging unless the inner packaging adequately protects the explosive against contact with the metal.

(2) The closure device of containers for liquid explosives must provide double protection against leakage, such as a screw cap secured in place with tape.

(3) Inner packagings, fitting, and cushioning materials, and the placing of explosive substances or articles in packages, must be such that no dangerous movement may occur within the packages during transportation.

(4) When the packaging includes water that could freeze during transportation, a sufficient amount of antifreeze, such as denatured ethyl alcohol, must be added to the water to prevent freezing. Anti-freeze that could create a fire hazard because of excessive volatility or excessive concentration may not be used.

(5) Each article fitted with a means of ignition or initiation must be effectively protected from accidental operation during normal conditions of transportation.

(6) For a metal packaging that is double-seamed, entry of an explosive substances into the recesses of the seams must be prevented.

(7) The closure device of an aluminum or steel drum should include a suitable gasket; if the closure device includes a screw-thread, the ingress of explosive substances must not be possible.

(8) If a metal-lined or rigid plastic-lined box is used for packaging an explosive substance, the box must be constructed in such a way that the explosive substance carried cannot get between the liner and the sides or bottom of the box.

(9) Whenever a box of ordinary natural wood is specified, plywood or reconstituted wood may be substituted for that material, if it is compatible with the explosive carried and is in compliance with the appropriate specification, if any.

(10) An explosive article containing an electrical means of initiation that is sensitive to external electromagnetic radiation, must have its means of initiation effectively protected from electromagnetic radiation sources (for example, radar or radio transmitters) through either design of packaging or the article, or both.

(11) If a plastic bag or plastic container is used in direct contact with the explosive, only those types of plastic may be used that:

(i) Will not build up an electrostatic charge which would lead to ignition of the explosive; and

(ii) Will not be deteriorated by or react dangerously with the explosive.

(12) A metal surface that could increase the sensitivity or decrease the thermal stability of an explosive may not be in contact with that explosive.

(13) An explosive must be in a waterproof receptacle if:

(i) It is water soluble;

(ii) It contains water or a water solution when offered for transportation; or

(iii) It contains a water soluble stabilizer.

(14) When this subpart requires a specified percentage of desensitizer or phlegmatizer to be mixed with an explosive, the percentage is based on the total weight of the mixture, not the weight of the explosive alone. When a percentage of water is specified and antifreeze must be added in accordance with paragraph (a)(4) of this section, the combined weight of the water and the antifreeze may be substituted for the weight of water required.

(15) Plastic packagings must not be liable to generate or accumulate sufficient static electricity that a discharge could cause the packaged explosive to ignite or the packaged article to function.

[Amdt. 173–224, 55 FR 52617 Dec. 21, 1990, as amended at 56 FR 66267, Dec. 20, 1991; Amdt. 173–241, 59 FR 67492, Dec. 29, 1994]

§173.61 Mixed packaging requirements.

(a) Unless specifically authorized in this subchapter, an explosive may not be packed in the same outside packaging with any other material, unless packaged by the DOD or DOE in accordance with §173.7(a) of this subchapter.

(b) Hardware necessary for assembly of explosive articles at the point-of-use may be packed in the same outside packaging with the explosive articles. The hardware must be securely packed in a separate inside packaging. Sufficient cushioning materials must be used to ensure that all inside packagings are securely packed in the outside packaging.

(c) The following explosives may not be packed together with other Class 1 explosives: UN 0029, UN 0030, UN 0073, UN 0106, UN 0107, UN 0255, UN 0257, UN 0267, UN 0360, UN 0361, UN 0364, UN 0365, UN 0366, UN 0367, UN 0408, UN 0409, UN 0410, UN 0455, UN 0456, and NA 0350. These explosives may be mix-packed with each other in accordance with the compatibility requirements prescribed in paragraph (e).

(d) Division 1.1 and 1.2 explosives may not be packed with the following explosives: UN 0333, UN 0334, UN 0335, UN 0336, and UN 0337.

(e) Except as prescribed in paragraphs (c) and (d) of this section, different explosives may be packed in one